

# THE DELAWARE<sup>AND</sup> HUDSON COMPANY BULLETIN

*"The  
D.H."*

JANUARY 1, 1930

LUMBER TRAIL  
NEAR LAKE PLACID





## The New Leaf



*H*E CAME to my desk with quivering lip,  
The lesson was done.  
“Have you a new leaf for me, dear Teacher?  
I have spoiled this one!”  
I took his leaf, all soiled and blotted  
And gave him a new one, all unspotted,  
Then into his tired heart I smiled:  
“Do better now, my child!”

I went to the throne, with trembling heart.  
The year was done.  
“Have you a New Year for me, dear Master?  
I have spoiled this one!”  
He took my year, all soiled and blotted  
And gave me a new one, all unspotted,  
Then, into my tired heart he smiled:  
“Do better now, my child!”

— Author Unknown.





*"The D.H."* *The* DELAWARE AND HUDSON COMPANY *"The D.H."*  
BULLETIN

Vol. 10

Albany, N. Y., January 1, 1930

No. 1

## Veteran of Binghamton Yards

*W. L. Parsons Completed Over Forty-Eight Years of Service Before His Retirement*

THINGS were pretty much the same as usual in Binghamton yard on July 1, 1928. There was the same busy air about everything which bespoke a heavy run of business. Trains were arriving and departing in rapid succession and the yard engines could hardly move fast enough to keep pace with the work before them. Yet before the morning was half over almost everyone felt that something was missing, although for a time all were at a loss to explain it. Then someone realized that this was the day that W. L. PARSONS, veteran yard clerk, with forty-eight years and two months of service to his credit, was to retire.

In term of service, MR. PARSONS was almost as old as the yards themselves. He had been working continuously since May 1, 1880, and he knew every bit of the Binghamton yards from one end to the other. To find him gone after so long a time was a blow to his many friends both among our own employes and those of our rail line connections at Binghamton.

If you should stand in the Binghamton yard today and watch the trains being interchanged between the various railroads which connect

at this busy terminal, it would be hard to form a picture of the situation as MR. PARSONS first saw it during his early days of service nearly a half century ago. His entire life, up to the time he went to work for our company, had been

spent on his parents' farm in the town of Conklin. Here he had gone to grammar school, later graduating from the high school in Binghamton, N. Y.

After he became of age his interest in the railroad began to grow daily. Fred Ronk, a close friend of the family, was a foreman on the Albany and Susquehanna Railroad, which later became a part of The Delaware and Hudson system. He lived a short distance from the Parsons family and a strong friendship sprang up between them. Almost nightly the two met and eventually Mr. Ronk persuaded young PARSONS to apply for a position with the railroad company.

Upon the recommendation of Mr. Ronk, WILLIAM secured a job on the transfer at Binghamton. At that time the Erie Railroad tracks were of broad (6 ft.) gauge while those of the Albany and Susquehanna were standard. For this reason cars could not be interchanged from one line to the other; their con-



W. L. PARSONS



## *The Delaware and Hudson Company Bulletin*

tents had to be transferred at every junction point. This was the purpose of the transfer on which MR. PARSONS saw his first service with our company.

At that time there were heavy shipments of grain, iron ore, rails, flour, sugar, molasses, and furniture through Binghamton. When transferring grain, a chute was run from the Erie to the Albany and Susquehanna car and the contents ran from one to the other by force of gravity. The rails were handled with derricks. Iron ore, of course, had to be trucked across the platform. Barrels of flour, sugar, and molasses were rolled from one car to another. At times they found a weak barrel of some one of these commodities, and if it was not carefully handled there would be flour, sugar, or molasses all over the platform. At that time the men on the transfer received one dollar per day and worked from 7 A. M. until 6 P. M.

In 1902 MR. PARSONS was transferred to the yard force as a car checker. With the exception of a short period when he worked as relief yard-master, he continued in this line of work until his retirement became effective in 1928. No position in the yard calls for more care and attention than that of a yard clerk. With the fast movement of freight trains, he must be "on the spot" when a train is ready to move in order to get the number and initial of each car, or he must explain the reason why. Being one minute late may mean that a score of cars has passed without his securing their numbers. Likewise care must be taken to get the right number and initial the first time. By the time he looks the second time the car may be out of sight.

The mistaking of a single letter or figure on a car might mean endless trouble to the yard office and traffic forces. This is particularly true on trains being delivered to connecting lines. By the time it is realized that a mistake has been made, the train may be miles away. While trains arriving from connections may be re-checked if necessary, the motto of MR. PARSONS, as well as every other yard clerk is, "Get the number right the first time and you won't have to worry."

As MR. PARSONS approached the seventy-year mark, he found that he could not get around as quickly as before. While he could still do his work accurately, he realized that the day was not far distant when he would not be able to continue. More important than that, however, was the fact that he was not as sure on his feet as before, and therefore apt to be injured. During his entire term of service MR. PARSONS never lost a day on account of an injury and this was

a record of which he was justly proud, and one which he did not wish to lose.

Still, he had always liked the railroad and its employes and it was hard to sever the friendships which were so long in the making. With the passage of his seventy-second birthday, however, MR. PARSONS turned his thoughts to retirement.

Since then he has spent most of his time at home. He busies himself in his garden and working about the house during the day, going for extended walks for exercise. As both he and Mrs. Parsons have President's passes and are entitled to foreign transportation, they intend to make several long trips in the near future.

MR. PARSONS is the father of seven children, two boys serving in France during the World War. Another was about to enter the army when the Armistice was signed; only his age preventing him from doing so before. MR. PARSONS is a member of the Lodge of Red Men in Binghamton.

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### *"Eyes, But They See Not!"*

THE signal section of the American Railway Association reports an interesting development in one of their recent meetings. The subject being discussed at the meeting was in the matter of flashing light crossing signals. A member quoted a friend who with the family was out driving and as they approached one of these lights the wife remarked what a clever scheme it was for marking railroad crossings whereupon the husband drove across the track just missing being struck by a train. Once across he stopped, saw the train go by and also saw the light stop flashing. Reports have it that he was a college graduate and an intelligent man but according to his statement did not know that the train was coming at all. It takes considerable ingenuity nowadays to make things absolutely fool-proof and it would seem that if persons are to judge the utility of a flashing crossing light as in this case, crossing accidents will never be entirely eliminated.—*Packing and Shipping.*

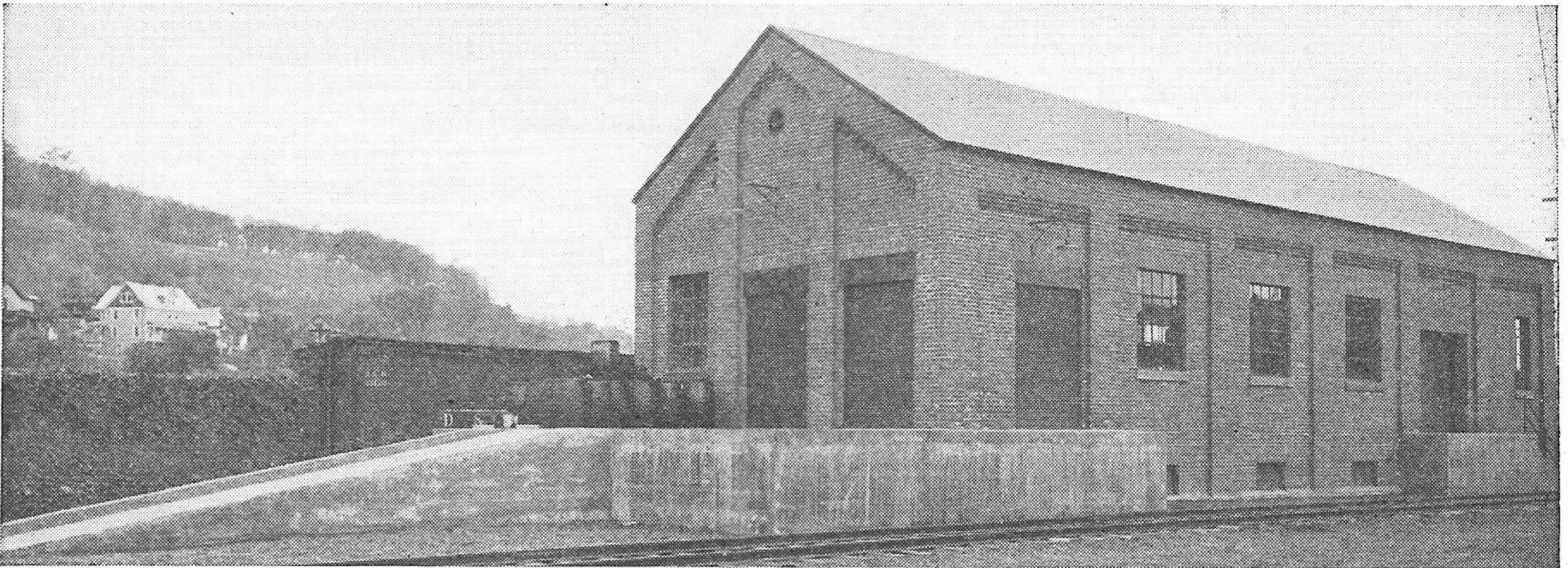
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He was one of those fellows whose growing waistline made it necessary for him to take some regular exercise. He decided to take up golf and went out one Saturday afternoon with a friend from the office.

With regular beginners' luck he hit the ball straight down the fairway from the first tee for a good drive.

"Now where do I run to?" he asked.





## *An Ideal Plant for Reclaiming Oil and Waste*

FACED by higher taxes, reduced incomes, and, in many instances, a struggle for their very existence, the railroads of this country have of necessity increased their operating efficiency in various ways. The serious and expensive delays occasioned by hot boxes were seen to be among the chief obstacles to efficient operation and this topic soon became one of paramount interest. When the conclusion was reached, by the members of the American Railway Association, that a periodic renewal of journal box packing in accordance with Rule 66, in addition to certain other precautions, was necessary to solve the hot-box problem, the question of increased expense arose immediately.

To repack all boxes with new oil and waste meant an enormous expenditure for material whereas it was believed that, in a properly equipped plant, the old packing could be satisfactorily cleaned, and renovated, at a comparatively low cost.

An experimental plant of The Delaware and Hudson Company which was constructed at Oneonta, and which was described in *The Bulletin* of March 15, 1929, proved so successful that a larger and better equipped building has recently been completed at that point under the supervision of representatives of the Engineering and Car Departments. It is being operated by the Car Department and will also supply the Motive Power requirements. The Maintenance of Way

Department will be able to use some of the by-products of the plant for lubricating switches, interlocking, etc.

The system marks a new era in waste reclamation. An outstanding feature is its simplicity and low operating cost, due to the mechanical methods developed by the Tolhurst Machine Works of Troy, N. Y., at the request of G. W. DITMORE, Master Car Builder. From twenty to twenty-five barrels of reclaimed journal box packing are produced at this plant each day.

The objectives sought are to separate the oil from the waste and effectively renovate both to meet A. R. A. specifications, as well as to re-impregnate the waste with reconditioned or new oil for lubricating purposes at a cost that will justify the investment. From present indications these objectives will be realized.

A clearer idea of how the plant operates may, perhaps, be obtained if the location of the various machinery, tanks, and vats is explained quickly, after which the paths followed by both oil and waste in the course of their reclamation, may be traced with greater ease.

In the basement are located three rectangular tanks each of 3500 gallons capacity, indicated in the accompanying photographs by the letters "A", "B", and "C". At the bottom of each tank, on the inside, are steam coils. Tank "A" is used for accumulating the dirty oil extracted.

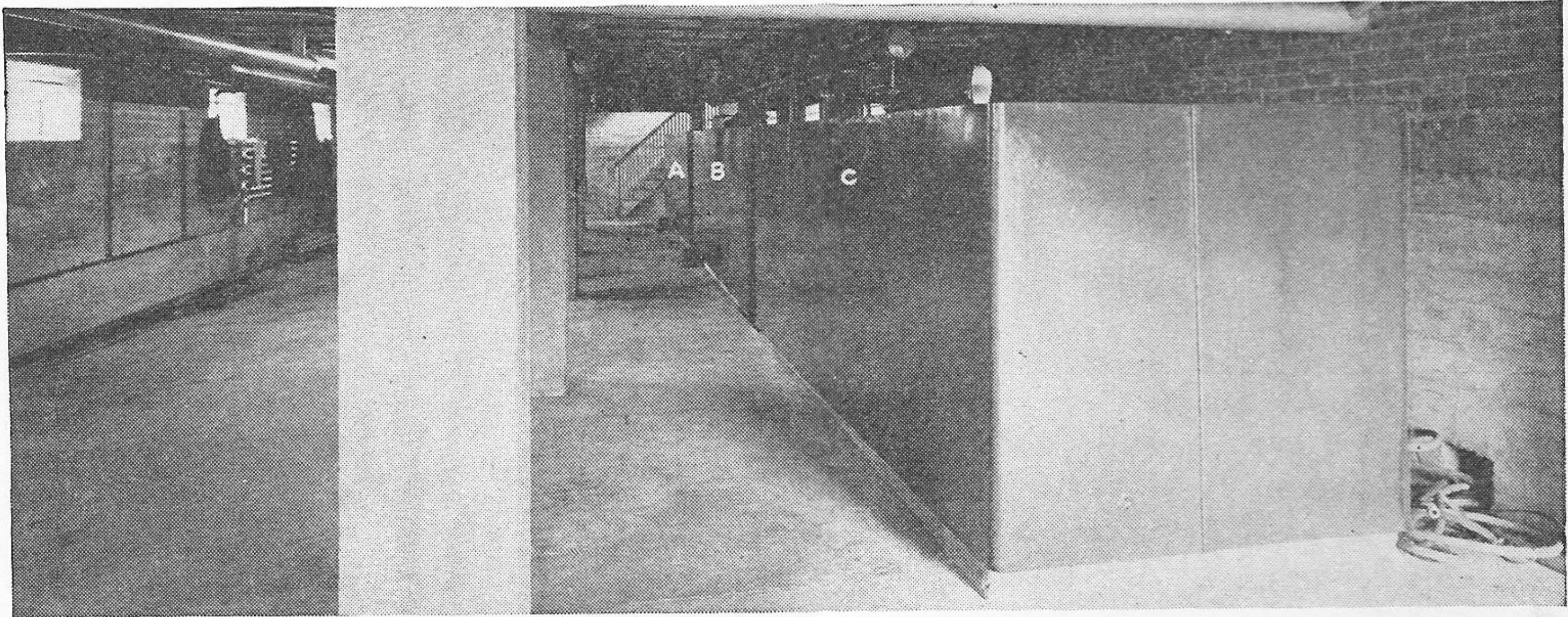


## *The Delaware and Hudson Company Bulletin*

from the packing by a centrifugal machine, located on the floor above. Tanks "B" and "C" are used alternately for accumulating and boiling renovated oil. In these tanks the oil is subjected to heat treatment to evaporate the water content.

which the period of operation is controlled. In connection with this extractor there are twelve interchangeable extractor baskets.

6. Oil boiling and waste saturating tanks, six in number, arranged in a single row under the



Oil Tanks "A", "B" and "C" are in the basement

Electrically driven centrifugal pumps, of which there are three, pump the oil from these tanks to the vats, extractor, clarifier, and settling tanks on the floor above.

A washing machine for cleaning wiping waste will be installed in the basement, also facilities to be provided for supplying the railroad's requirements of locomotive journal compound.

The apparatus on the main floor of the building has been numbered as follows:

1. Platform scales sunk to floor level for weighing inbound and outbound waste.

2. Rack for washing the metal containers in which both the dirty and the reclaimed waste is shipped to and from the plant. (Not shown.)

3. Overhead tramrail crane from which is suspended an air hoist for handling extractor baskets, either loaded or empty, to and from the various tanks and extractor.

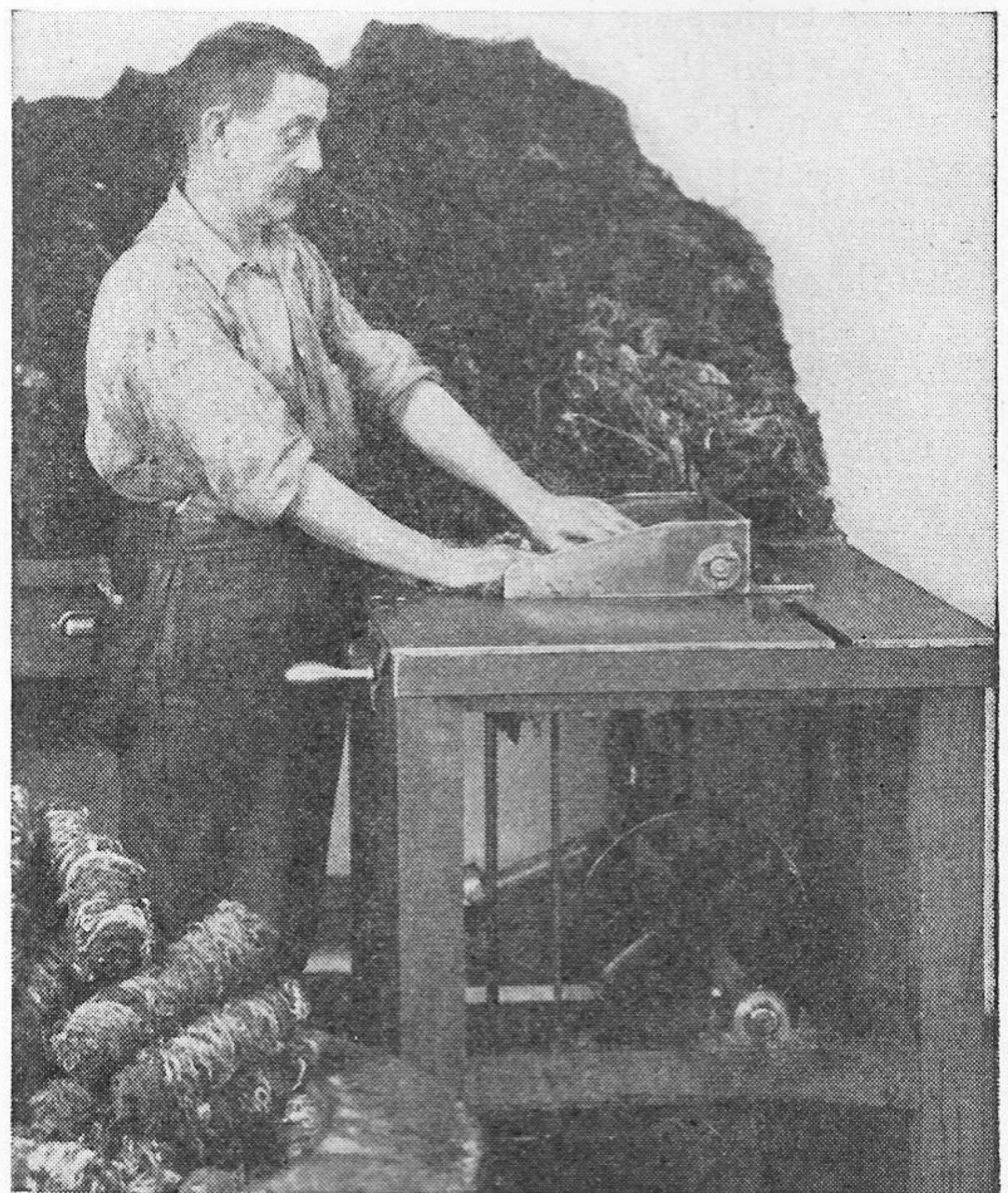
4. Perforated cylindrical tumbler, 12 ft. long, 4 ft. diameter, open at both ends, which revolves in open space on an inclined axis. On the inner surface of this drum there are three rows of pegs spaced equidistant the full length of the tumbler. These pegs project inwardly toward the center, the purpose being to carry the packing to a position higher than its cascading point to loosen up the strands.

5. Electrically driven, two speed, 48 inch Tolhurst extractor, equipped with a timing device by

overhead tramrail crane and in line with the extractor.

7. Oil settling tanks, three in number, in which the renovated oil is allowed to settle before decanting to the oil storage tank.

8. Electrically driven Tolhurst centrifugal clarifier, of the suspended type, having an im-



Making Back End Rolls

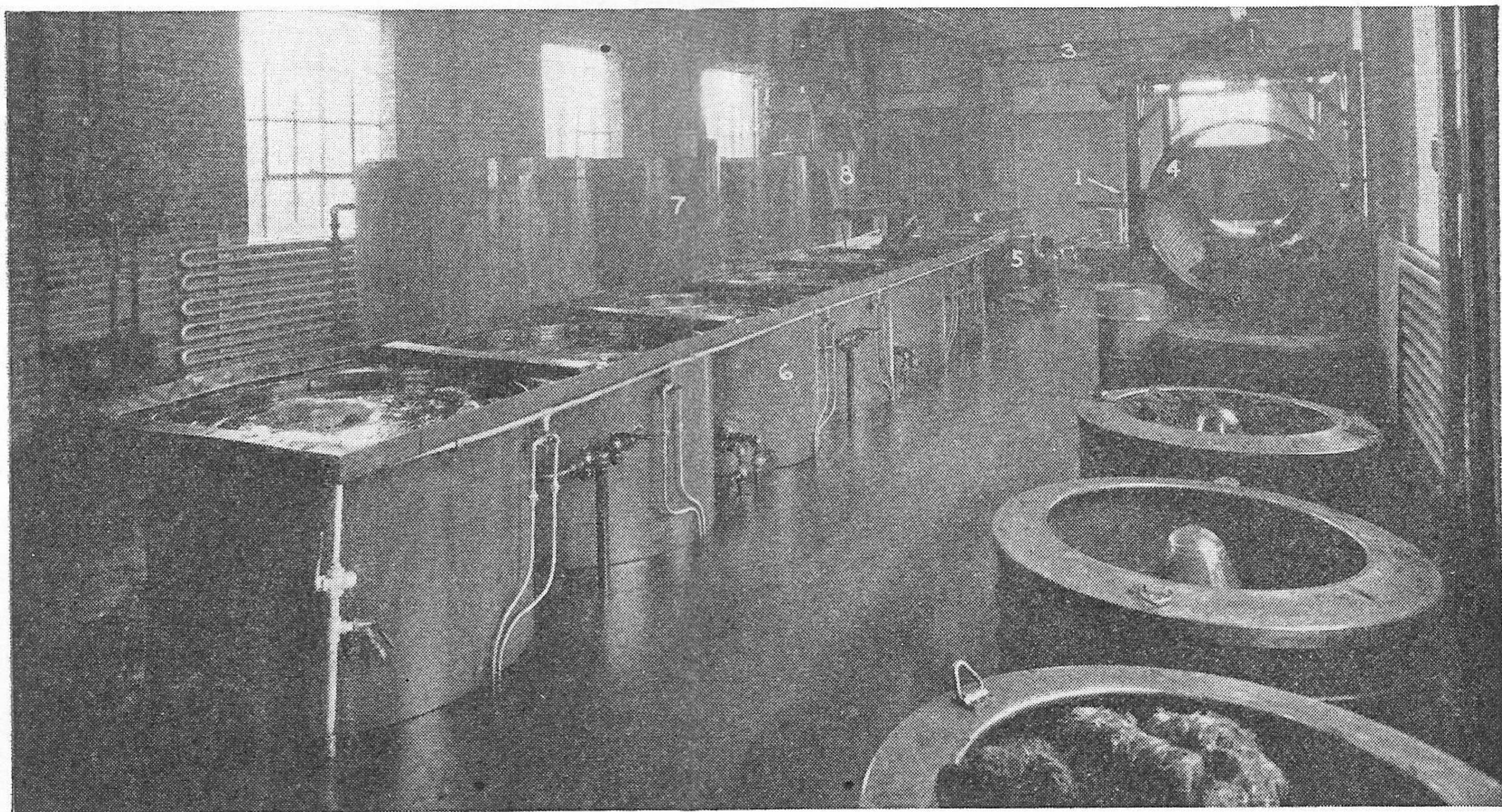


perforate basket into which dirty oil is fed at or near the bottom while the basket is revolving at full speed. The centrifugal action deposits the dirt and grit on the inside of the imperforate basket and, when a sufficient quantity of oil has been fed to completely fill the basket, the oil that has been renovated by this process is thrown over the top of the basket into the outer casing from which it passes through a drain pipe to tanks "B" and "C" in the basement.

9. Roll making machine dispensing entirely with rolling by hand except insofar as the actual feeding of the packing by the operator is concerned. Each back end roll is made to proper size in accordance with the gauge used in conjunction with the machine. (Not shown.)

lowered to the floor and held inverted over a pipe in the center of the wash rack (2) through which a jet of renovated oil is projected to remove any dirt that may remain in the container. The oil used and recovered in this operation, after passing through a coarse screen, is deposited in the dirty oil tank "A" in the basement.

The packing in the basket is then subjected to treatment in the centrifugal extractor to clean it, hot renovated oil being pumped from either tank, "B" or "C", into the extractor basket while the machine is being rotated slowly, after which the timing device is set and the extractor operated at a high speed until most of the oil is forced out of the packing. The oil carries with it much of the dirt and other foreign matter as it flows from



General View of First Floor

A main oil storage tank of 5,000 gallons capacity is located in the extension to the building in the rear, an electrically driven centrifugal pump being used to distribute this oil to the six saturating tanks on the first floor as required.

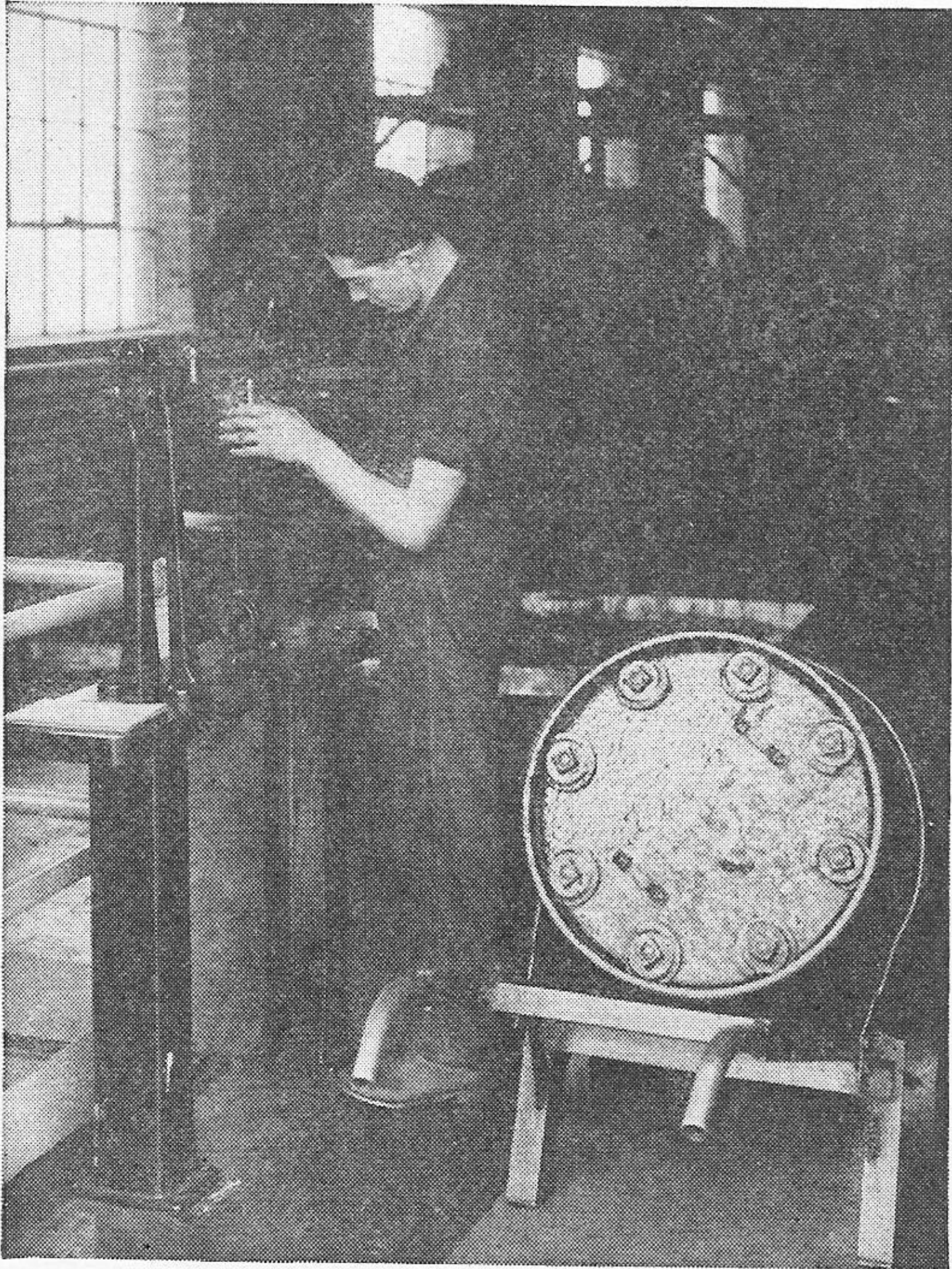
In considering the actual operation of the plant the handling of the waste will first be described.

The packing removed from the journal boxes is delivered to the plant in steel containers, and weighed and recorded at platform scales. The containers are then removed to a position under the tramrail crane where the contents are emptied into one of the removable baskets of the centrifugal extractor (5). The empty container is then

the extractor through a drain pipe to tank "A" in the basement. The period of extraction is controlled by the timing device which automatically stops the extractor and the waste-laden basket is then removed and conveyed by the overhead crane to the perforated cylindrical tumbler (4).

The waste is then passed, either by hand or mechanical feeder, into the elevated end of the tumbler (by this method an opportunity is afforded to open up any tight rolls and remove any large lumps of foreign matter before the waste is emptied into the tumbler) and, as it passes through, it is loosened by this tumbling action and the short ends and dirt sift through the perforations. Such refuse is caught in a chute under





Weighing Waste on Arrival

the tumbler and removed through the three metal doors in the wall of the building. This tumbler revolves on an axis slightly inclined from a horizontal position and the waste is discharged in a fluffy condition at the lower end into an extractor basket. It is then carried by the overhead crane back to the extractor a second time and the cleaning process is repeated. By reason of the fluffy condition of the waste it is now more susceptible to the cleaning action of the hot oil flowing through it than during the first treatment in the centrifugal extractor.

It is next removed and submerged in one of the six saturating tanks containing reconditioned or new oil. Here the waste is allowed to remain for a period of about two hours at a high temperature to evaporate any moisture and to insure thorough saturation. The next step is to convey the waste-laden basket to the extractor where it is rotated slowly until the oil content in the waste is of the proper proportion. The finished product is placed in containers, weighed, and is then ready for shipment.

As the layout suggests, the operation is continuous, one basket of packing following another through the various mechanical steps without interruption, thus insuring capacity production with reasonable promptness and at a minimum cost.

The oil extracted from the packing in the centrifugal extractor flows through a drain pipe into a 3,500 gallon tank, (A) in the basement. In fact, the piping in the plant is so arranged that all dirty oil in the oil and waste reclamation processes reaches this tank. The oil in tank "A" is heated to make it flow more readily, after which it is delivered, by means of an electrically driven centrifugal pump, to the suspended clarifier (8) where it is fed in near the bottom while the machine is operating at full speed. (See description of clarifier.) The sludge or sediment that remains at the end of this clarifying process is removed from the clarifier and used for lubricating switches, painting angle bars, greasing center plates and various other purposes.

The renovated oil is delivered by the centrifugal clarifier to the tanks, ("B" and "C"), in the basement. Here some of the renovated oil is bypassed for the treatment of waste as has been previously described. The renovated oil remaining, after further heat treatment in these tanks to remove accumulated moisture, is delivered to the three large tanks on the first floor where it is allowed to settle. A chemical compound is



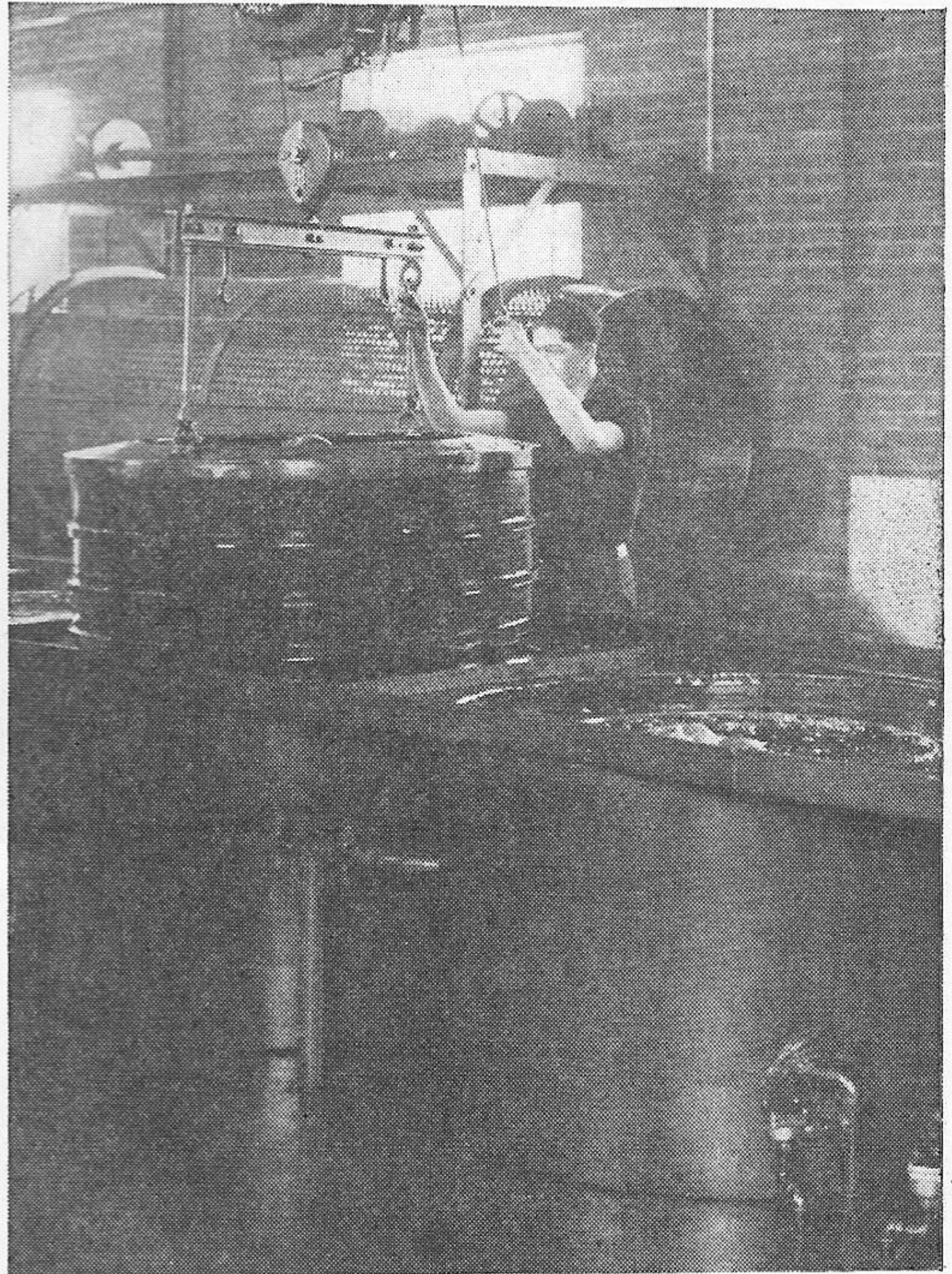
Placing Basket in Extractor



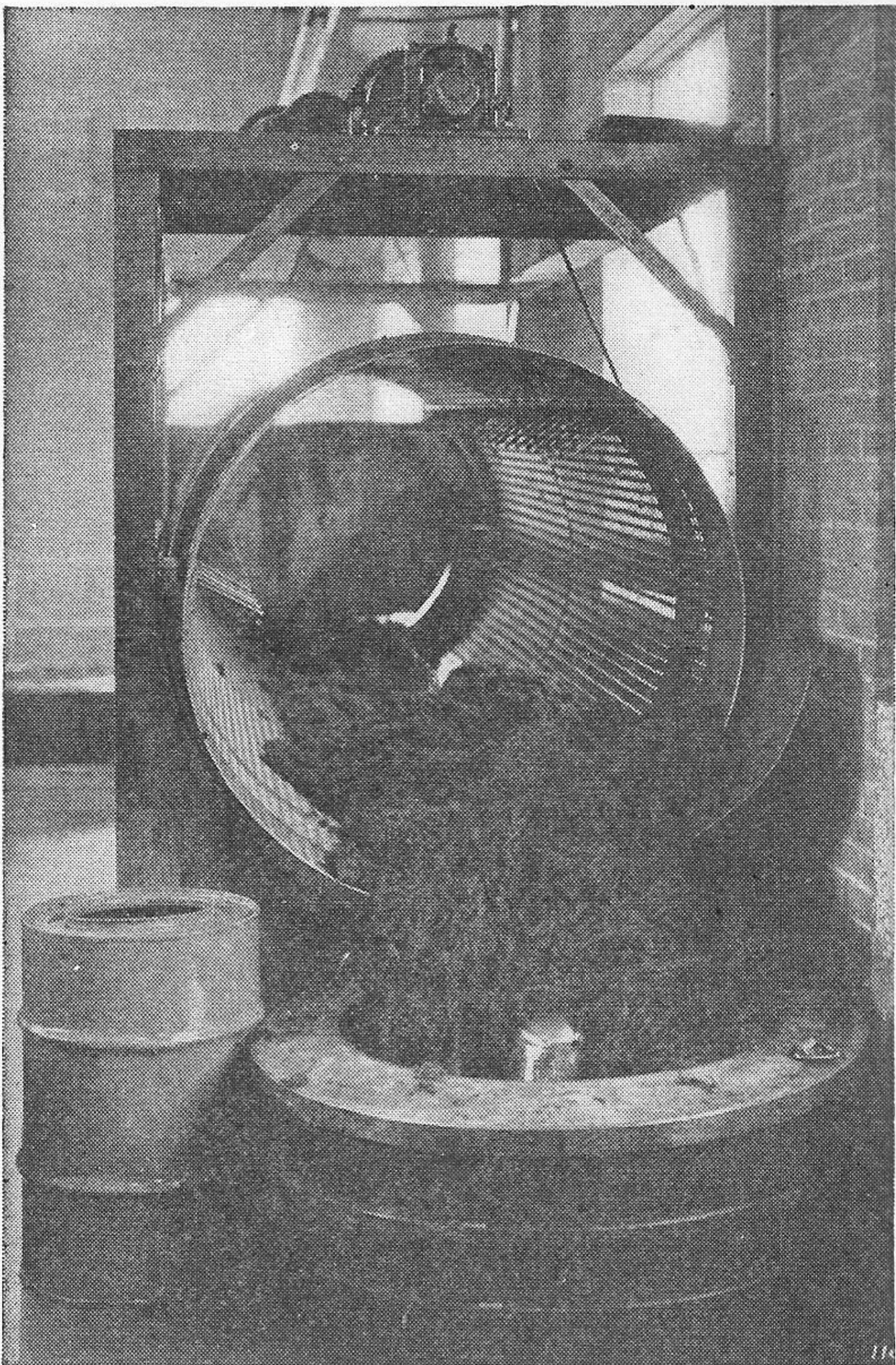
sprinkled on the surface of the oil to hasten the precipitation of any foreign substances remaining. The depth of good oil is determined by immersing a strip of clear glass after which the reconditioned oil is decanted, by means of a collapsible pipe in the tanks, and delivered to the main storage tank which also contains new oil as received from the refinery.

It will be noted that mention is made of renovated and reconditioned oils and, since the use of these terms may be confusing, it is felt each should be clearly defined. When the oil leaves the clarifier (8) it is designated as "renovated oil". From tanks ("B") and ("C") the renovated oil is pumped to the three settling tanks (7) for further treatment after the completion of which it is designated as "reconditioned oil".

A system of distribution has been arranged whereby the stations to be supplied are divided into zones. By way of illustration, zone No. 3, comprises four stations, viz: Colonie, Green Island, Mechanicville, and Glenville. A car is loaded at the plant with the packing requisitioned and the barrels are delivered to the stations in the order named. Each point receives an advance



Immersing Waste in Oil Tank



Cylindrical Tumbler

shipping notice and, when a shipment is received, the number of barrels consigned to it is removed and the car reloaded with the old packing on hand. Acknowledgment of the material received is made on this shipping notice together with a notation of the number of barrels of packing returned to Oneonta for reclamation. By this system, shipments are made in substantial quantities and empty mileage is reduced to a minimum. Moreover, advance knowledge is had of the packing en route for reclamation.

The building housing the plant is a one-story and basement fireproof structure of brick with reinforced concrete floors and a slate roof. It is approximately 30 feet wide by 80 in length, with an oil storage tank room (11 x 33 feet) built at the rear on the basement level. An elevator facilitates the handling of material between floors.

For the convenience of the employees of the Reclamation Plant, a roomy office and locker and dressing rooms of the latest type, fitted with individual metal lockers, are located at one end of the building. These adjoin a room containing a tiled shower bath, lavatory facilities, and a drinking fountain.

A washable enamel paint has been used on the walls in the interest of cleanliness, which is a cardinal virtue over the entire railroad. To sim-

(Turn to page 13)



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# *The*

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## Delaware and Hudson Company BULLETIN

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Vol. 10                      January 1, 1930                      No. 1

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### *Index To 1929 Bulletins*

AN index of the articles appearing in the issues of *The Bulletin* during the year 1929 has been prepared and copies will be sent to readers on request. To secure a copy, address Supervisor of Publications, Room 905, Delaware and Hudson Building, Albany, N. Y.

### *Advice for the New Year*

EVERY older man has a duty to younger men. He should pass along what he has learned from experience.

Young men appreciate the counsel of older heads, more than the older men know.

In conversation this advice came to a young man: "Don't let yourself be undone by little things. Get to work on time. Get to bed at a reasonable hour, so that you will be awake in the daytime. Wear clean linen and well pressed clothes. When in doubt—shave.

"Invest your first dollars in yourself. Buy good books and read them. Cultivate the friendship of older men. Join a study class, a mail course if nothing better is available. Subscribe for your business or professional papers. Keep familiar with what's going on, not only in sports, but also in business, finance, politics, education, and science.

"Pay every bill when due. Buy nothing until you know you can pay for it. The habit of paying your bills promptly and the reputation for meeting your obligations may become your most valuable business asset. When you try to command capital your record will be checked.

"Guard your health. Energy flows from well-being. Not even brains will make up for lack of physical fitness.

"By the time you are thirty you should have a philosophy and a goal. Know what you want out of life. You can't get everything, but most men can get what they want. If you want money more than anything else, then you may have to sacrifice everything else. Maybe you prefer a modest income and freedom from excessive worry and responsibility. Until you know that, you will be like a motorist without a destination—just joyriding."—*Through the Meshes*.

### *Rapid Transit Scorned*

IN an article on "The Moon Rocket Fore-shadowed" by John Andrews appearing in the November *Discovery*, we read, "Now that man has at last traveled through the air in a rocket, a comparison made a hundred years ago is not without interest. Ridiculing the locomotive in 1829, an English engineer asked what could be more palpably foolish and ridiculous than the proposal to build a locomotive with double the speed of a post coach. 'One can just as well' he wrote, 'expect the citizens of Woolwich or Manchester to travel by a Congreve war rocket.' That was at the time when the far-sighted inventor, George Stevenson, named his first engine the 'Rocket'."

### *Just A Second!*

DURING each second of each hour of each day last year the railways of the United States

Handled 15,125 ton-miles and 1,000 passenger-miles;

Earned \$1,936 in operating revenues;

Expended \$1,402 in operating expenses, including wages paid to employees;

Paid \$1,234 in taxes to the Federal, state and local governments.

So does the value of a second of time in railway operation, when multiplied by the millions of daily movements, mount up into tremendous amounts of economic gain to the country.



## *A Few Suggestions on*

# *The Care of Your Timekeepers*

**I**N the United States Observatory at Washington there are several Riefler clocks which have been built and installed at great expense.

These clocks have been mounted on concrete piers to avoid vibration. They are housed in a room which is kept always at constant temperature. Every twenty-eight seconds they are automatically wound by electricity—they run in a vacuum. Yet in spite of all precautions which human ingenuity can devise, the clocks do not keep perfect time.

The fixed stars are nature's own timekeepers. They alone are accurate. Through nightly observations upon the stars, corrections are made in the variations of these clocks so that the nation may have its time nearly correct.

The public, ignorant of the fact that the keeping of perfect time is a mechanical impossibility, is grievously in error in expecting absolute accuracy from a watch. Bumped and rattled about, subjected to extreme variations in temperature and position, wound at any time or not at all, and allowed to run with the accumulated dirt of years and the absence of any trace of oil, a watch which keeps approximately good time is indeed a marvelous mechanism.

A well-known soap is advertised as being 99 and 44-100 per cent pure, which is accepted as well-nigh perfect purity. Yet a watch which gains or loses only five minutes a week is 99 and 95-100 per cent accurate.

Obviously a cheaply made watch cannot be as accurate as a finely made one, nor a very small movement as sturdy, and therefore dependable, as a larger one.

The degree of accuracy of a watch could be guaranteed by its makers if it was assured certain care and attention and if it was known that it would be worn only under certain circumstances and always held in certain given positions.

Fine marine chronometers which render super-accurate time keeping are mounted on a device which suspends the movement in a level position at all times, free from the motion of the rocking and pitching of the ship. Also fine watches

which are submitted to official observatory tests and which are the highest rated watch timekeepers in the world, are all tested in certain given positions and temperatures and, during the period of each test, are supported in a fixed position.

A man's pocket watch is ordinarily held for long periods at a time in one position in the pocket, on the desk, or dressing table. It is not submitted to the continued and incessant change of position of a wrist watch, which, on the arm, is subjected to every movement of the hand.

Therefore, pocket watch accuracy should not be expected or demanded of a wrist watch. Consider that one minute's variation a day means only one beat's variation out of 1,440. At this rate, therefore, the following table may be accepted as accurately defining the timekeeping rating of a wrist or strap watch:

One-half minute a day is very good time.

One minute a day is good time.

Two minutes a day is standard government time required of a large strap watch.

The pocket watch and the strap or wrist watch have two different advantages:

*The pocket watch for accuracy.*

*The wrist watch for convenience.*

Most watches are born healthy and most watches are healthy when you buy them, but rare indeed is the watch that has buffeted the world and suffered through neglect that is giving the timekeeping service and satisfaction which it rightfully should.

A good watch is the most delicate, accurate instrument in general use. The tiny wheels, screws, balance, escapement, pinions, and pivots are made with a mechanical precision rarely employed in other commercial manufacture.

Science, art, and the greatest human skill all contributed to the making of your watch. In justice to this painstaking care and to the service you have a right to expect from the price you paid for your watch, you should give this marvelous mechanism the simple and reasonable care which is required in order that it serve you faithfully and well.



## *The Delaware and Hudson Company Bulletin*

There are two rules, which if observed, will contribute most to the life of your watch:

1. Do not wait for your watch to break down from overwork. When a watch stops because of accumulated dirt in the movement or from lack of oil, it means that for the last several weeks or months it has run under an undue strain and this may do excessive damage requiring the replacement of vital parts.

2. Trust your watch only with a capable watchmaker. Tinkering with it yourself, or having repairs attempted by an unskilled workman will probably do more harm than good.

Wind your watch fully, else it may not run a full twenty-four hours. Few mainsprings are broken in winding.

A watch will run most uniformly if wound at regular intervals, preferably in the morning. Then the mainspring will exert its greatest power for the activities of the day and its lowest power at night when your watch is at rest while you sleep.

In setting, other than a striking watch, move the hands either forward or backward. There is no damage done in setting the hands when the watch is running.

At night, keep your watch away from radiators or open windows. Excessive heat or cold is a burden to accurate watch operation.

Keep your watch pocket or your handbag free from lint or dust if you carry your watch there.

Do not keep your watch under your pillow at night, where it is likely to receive a bump or a fall.

Do not wear a watch in a strong magnetic or electric field, else it may become magnetized. Avoid close proximity to telephone switchboards, exposed electric generators or transformers, radio equipment, etc.

So far as practical, keep your watch in an upright position. At night, stand it upright if you remove it from your pocket.

Carry it in your pocket with the crystal turned towards your body. The likelihood of breakage from knocking is thereby lessened.

Do not attempt to have a new watch timed until you have worn it several weeks. Then have it attended to by one watchmaker and keep note of its variations, the interval between each adjustment and the extent of the adjustment made at each visit.

A pocket watch, having a powerful mainspring, will run for some time even though all trace of oil has disappeared, and considerable damage may be done by the pivot bearings scoring. It is essential, therefore, that it be cleaned and oiled

every twelve to eighteen months before signs of trouble are noticed.

Care should be taken to see that face powder does not come in contact with a small wrist watch. It should be removed from the arm when the toilet is being made, and it should never be placed in a purse or dresser drawer in which a powder puff has been kept.

It goes almost without saying that a watch should never be immersed in water. The case is never absolutely watertight, and should moisture be admitted, it is likely to rust the fine steel parts.

A small wrist watch has a very weak mainspring and the power is not great enough to do damage after the oil has become dried. A tiny speck of dust may cause it to stop. Consequently, watches of this type may be allowed to run without overhauling until they run irregularly or stop. Usually wrist watches should be cleaned and oiled every five to eight months.

Do not unnecessarily open the face or back of your watch, exposing it thus to particles of dust and dampness.

As in most other things, there is only one right way to clean your watch. Unfortunately, most people have little appreciation of what this involves. As a result good watches are sometimes unthinkingly left with non-professional workmen, who simply dip the entire movements in benzine for a cheap price. Quite naturally, therefore, the watch is soon found to be in need of an overhauling.

The proper way to have your watch cleaned is to take it to a jeweler, whose watch-making capabilities and business integrity are unquestioned. There, the movement is taken apart and each of the 150-odd pieces separately cleaned to remove the accumulated dirt and old, gummed oil.

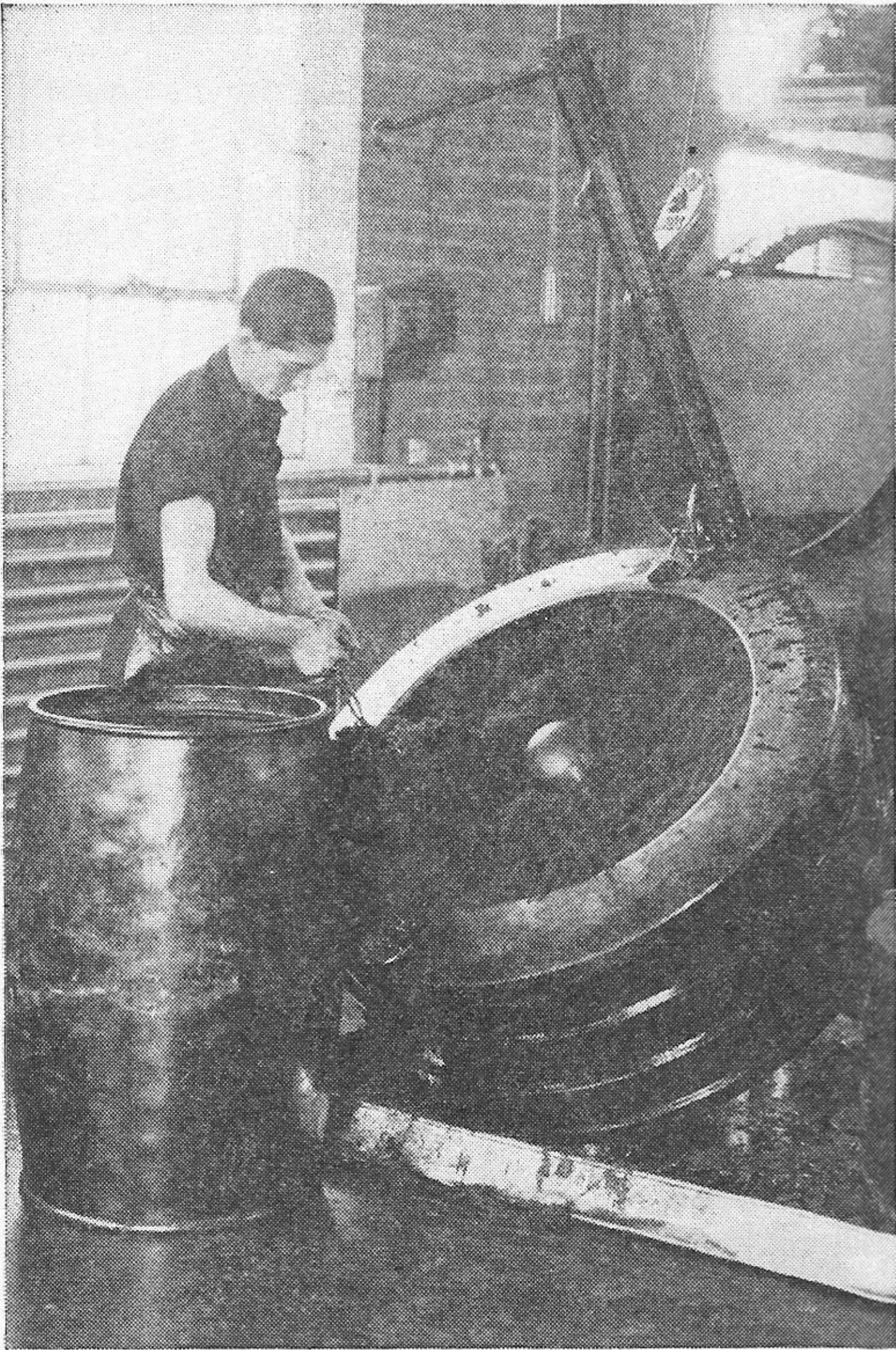
The movement is reassembled and all bearing surfaces are then oiled with a highly-refined watch oil, after this the movement is timed and readjusted.

Such watch cleaning is exactly the same as your watch received at the factory when it was new, and taking as it does from three to six hours of a good watchmaker's time, it is worth from \$5.00 to \$10.00, both because of the amount of professional time consumed and the length of trouble-free service such a proper cleaning assures.

The balance wheel turns, or ticks:

5 times each second  
300 times each minute  
18,000 times each hour  
432,000 times each day  
157,680,000 times a year





Packing Reclaimed Waste for Shipment

or about 3,186 miles, equivalent to traveling the distance between New York and San Francisco.

Would you dare to drive your automobile that distance without fresh oil or attention?

—*Illinois Central Magazine.*

### *Ideal Reclamation Plant*

(Continued from page 9)

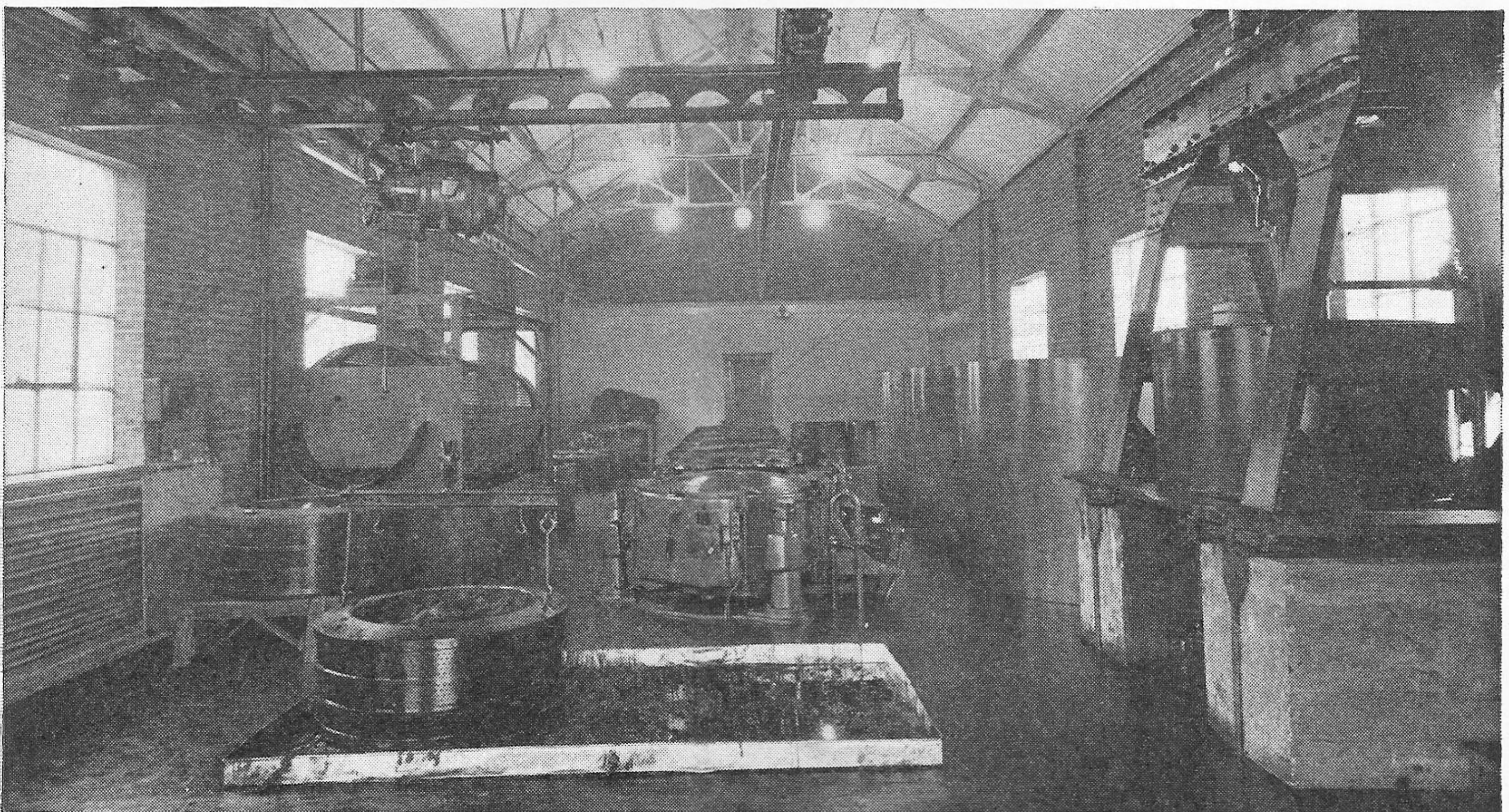
plify the tracing of the many pipe lines, each has been assigned a color which indicates the service for which it is used. The colors used are:

Renovated oil .....	Red
New or reconditioned oil.....	Light green
River water .....	Blue
City water .....	Aluminum
Sewage .....	Gray
High pressure steam.....	Black
Air lines .....	White
Electric conduits .....	Olive green

Bar handle four-wheel platform trucks are used for handling the extractor baskets and special two-wheel trucks, provided with a bale, enable one man to pick up and remove with ease a metal container loaded with packing.

The personnel consists of one supervisor and three men. The latter are compensated under the piecework plan.

The plant is modern in every respect and the results thus far, both as to quality of the product and operating costs, have been very gratifying.



Tolhurst Extractor in Center ; Suspended Clarifier at Extreme Right



### *Travelers' Troubles*

(From "London Opinion")

WHEN by train we decide to go  
A pleasant trip anticipating,  
Alas! how little do we know  
What troubles we're accumulating.

For instance, when we're striving hard  
To reach some westbound station lonely,  
How oft' we find upon the card \*

And if on Monday we should try  
To catch the train with grim precision,  
Upon the bill we're sure to spy †

Another train we struggle then  
To find—and we are informed with unction,  
That passengers to Cowslip Glen‡

Or if we think instead we'll go  
To Mudcombe Marsh, ere summer's ended,  
This sign the table's sure to show §

Undaunted still we persevere  
And settle on Hawthornley Dene  
To find that passengers from here ||

Through seas of figures then we wade,  
And hieroglyphic signs unfeeling  
To see, when next a choice is made ¶

Once more the direful sheet we scan,  
Our travel prospects nearly flitted,  
To meet another cheerless ban =

Enraged, our quest we still pursue,  
And from our course brook no deflection  
Until this symbol comes in view ×

And further down we note this sign  
Which worst of all that we can quote is +

- 
- \* This train stops here on Mondays only.
  - † Runs only on the East Division.
  - ‡ Must change at Muddle-Puddle Junction.
  - § The Mudcombe service is suspended.
  - || Alight at Brableborough Green.
  - ¶ This Train now only runs to Ealing.
  - = No third-class passengers permitted.
  - × This train no longer has connection.
  - + All trains are subject on this line  
To alteration without notice.
- 

Little Maurice had just seen—and heard—his father step on a tack with his bare foot, and came running to his mother in wild excitement.

"Ma, come quick," he called, "Pa's got a puncture."

### *Aluminum Pans Not Harmful*

INVESTIGATIONS carried out by Professor F. P. Underhill and associates in Yale University dealing particularly with the question of how aluminum is taken up in the body and what becomes of it, seem to prove that the argument against the use of aluminum cooking utensils, or of a baking powder containing aluminum, because of their supposed deleterious effect on the human system, is without foundation.

It has been found that aluminum is regularly absorbed into the body in small quantities when taken in food; that the body is likely to take up only a certain amount, after which absorption decreases and the excess is excreted either in the bile or by way of the bladder.

Various food substances were examined. It was found that cherries and onions contained the largest amount of aluminum; that lettuce, milk, flour and liver contained fairly large quantities while smaller amounts were found in many other foods.

Professor Underhill continues:

"For years we have realized the importance of moderation in all things. Quite recently we have begun to realize the tremendous importance of very small quantities of certain substances in relation to human life. A tiny dose of iodine or of phosphorus may be of vital importance to the human body; a large dose of either substance may be a dangerous poison. Apparently aluminum is one of the metallic elements that has regularly entered for years into the human being by way of the diet and without dangerous results. There is a possibility that a great overdose of the substance would be harmful, but it is hard to conceive how a dose can be had through baking powder or through the use of aluminum cooking utensils that will cause harm to the average human being. Apparently the substance is not accumulated in great amounts in the body, and when a certain level has been reached the excess is excreted."

---

An excited man came rushing into a crowded railroad car and exclaimed: "A woman has fainted in the next car. Has anyone a little brandy?"

A man near by reached into his bag and drew out a small flask which he politely gave to the stranger. The stranger drank the contents of the flask, smacked his lips and added: "Thanks awfully, my friend: it always upsets me to see a woman faint."—*Right Way Magazine*.



## Clicks from the Rails

### Beware the "Joltograph"

The "where, when, and how" of rough handling will be easily determined in the future if the inventor of the "joltograph" has his way. This new device is similar in construction and method of operation to the seismograph which records earthquakes at any point on the globe. Not that cars are treated as roughly by engineers as they would be by an earthquake—but at times freight is damaged in transit. With the "joltograph" as an escort for a shipment, making a record of every shock, together with the exact time it occurred, the shipper can tell very accurately where his goods were damaged, if at all, in transit. It is being perfected by the Oakland Motor Car Company for use in the freight cars in which Oaklands and Pontiacs are shipped to their dealers.

\* \* \*

### Difficult Shipment Handled

In order to move a consignment of giant transformers over the Erie from Sharon, Pa., to Roseland, N. J., it was necessary for that line to build temporary lines in the mountains, strengthen bridges, and lower the tracks a distance of 20 inches for 450 feet in order to clear an overhead bridge. This latter work had to be done entirely by pick and shovel during daylight hours.

The transformers were loaded on six-wheel truck well cars and the total height of the transformers from the top of the rail was 17 feet, 9½ inches. The total weight approximated 269,050 pounds.

\* \* \*

### New "Markers" for "Flyer"

The "Dixie Flyer," the Nashville, Chattanooga & St. Louis crack train, will henceforth be hauled by a locomotive especially painted for the run. Dark maroon was selected for use on the tender, cab, jacket, cylinder casings, headlight, stack, and bell bracket. The front end of the smoke box is being finished with a light graphite paint. The wheels and other parts of the locomotive below the running board will be painted black.

### Railroaders Like Music

According to Kenneth S. Clark, whose new volume, "Music in Industry", has just come from the press, railroaders are the most musical of all industrial groups. Mr. Clark says that musical activities are carried on in 697 industrial and commercial establishments in this country. There are 267 bands, 182 orchestras, and 176 choruses represented in his account. In addition, there are 133 plants where organized group singing has been established, and 273 other plants which provide musical instruments for employees.

\* \* \*

### "Mark Twain"

How the famous American humorist, Mark Twain, assumed that nom de plume is told by Charles C. Carroll, 86-year-old vice-president of the First National Bank of Springfield, Ill. Mr. Carroll, himself a veteran of rail and river service, says: "Sam Clemens took his writer's name, 'Mark Twain,' from an expression used by the members of a steamboat crew who were sent by the pilot to determine the depth of the water when the pilot thought there had been a change in channel or when he was running into unknown waters of which he was suspicious. As he heaved the lead, some member of the crew would sing out the depth up to two fathoms, which he called 'mark twain'. Its adoption as a name 'marked' Mark Twain as a river man."

\* \* \*

### The "Lungers" Pass

Some years ago 11 tubercular patients, who had migrated to Fort Stanton, N. M., decided to go to El Paso to see a show. The one drawback was that they had no money with which to pay their fare. Accordingly, they formed an organization, called themselves the Amalgamated Association of Consolidated Lungers of New Mexico, and applied for a pass. Pleased by this spirit, C. B. Eddy, then president of the El Paso & Northwestern, supplied the requisite pass, made out to: "J. R. Thomas and Eleven Lungers."—*Railway Age*.

### Snails Halt Morocco Trains

Locusts have been known to stop trains in Egypt and Tunis, and grasshoppers have done the same trick in Argentina, while the despised caterpillars have stalled American locomotives, but a story is being printed in Paris papers showing that the humble snail has been successful in doing the trick in the French zone of Morocco.

A heavily laden freight train was on its way from Casablanca to Kourigha when it was found that the wheels of the locomotive, although they continued to revolve, made no progress. Investigation proved that the rails were covered with millions of snails. Although sand helped the locomotive to plow its way through the invaders for a distance, it eventually had to stop and wait until a relief engine arrived from Kourigha.—*Clipped*.

\* \* \*

### Speeds Compared

The new 61-hour trains from the Pacific Coast to Chicago would have been regarded as an impossibility 30 years ago. For example, when Nellie Bly made her famous trip around the world in 1890, and fractured all previous records by performing the journey in 72 days, she used the Santa Fe from San Francisco to Chicago, and made the distance of 2,577 miles on a special train, in 69 hours, which was regarded as terrifically fast time in those days. This represented an average speed of only a little more than 37 miles an hour, but some fast running was done on intermediate stretches, as follows: 62 miles in 52 minutes; 69 miles in 53 minutes; 120 miles in 118 minutes, and 241 miles in 252 minutes.—*Railway Age*.

\* \* \*

### Locomotive a Curiosity

A locomotive is still regarded as little short of a miracle in parts of Russia, and at least 40,000 people assembled at Alma Ata, in Turkestan, to see the arrival of the first train on the newly constructed Turkestan-Siberian railway. According to reports, hundreds of people arrived on horseback and many walked for several days from outlying villages. It was estimated that at least three-fourths of the gathering had never before seen a locomotive.



## Another Year



**N**O matter what the past has been  
The world will join with you and grin  
If finally you stand to win.  
Defeat is just an exercise —  
A training school to set you wise —  
To show the things you must not do.  
Gird up your loins—try anew !  
Screw up your courage—what's to fear ?  
We've started on another year.

— *Anon.*